5.5 Management and Marketing

(1) Management

One of the problems of Zimbabwe's industrial structure is the poor linkage between large enterprises and SMEs. The dual structure of the economy originating from gaps between large enterprises and SMEs and the low level of participation of indigenous people in economic activities also constitute social problems. Even though SMEs are defined as enterprises with not more than 100 employees, the reality appears to be that very small enterprises (VSEs) with not more than 10 employees account for 96% of SMEs, showing a dual structure in terms of size among SMEs.

<Recommendation 1: Development of information sources to improve managerial abilities>

In Zimbabwe, such public organizations as the ZNCC, IBDZ, VCC, ZIC, CGC, ZDB, SEDCO and ZIMTRADE and private bodies provide advisory services based on their respective roles. The ZIMTRADE alone already offers more than 30 domestic and foreign databases and provides information on business opportunities through the Internet. The surveys conducted so far, however, have found a strong opinion that there is a lack of means of access to useful information for SMEs. Even though the information provided by each service provider differs, the clients receiving managerial guidance may well be the same. The possession of diagnostic data on management, marketing and technology, etc. without coordination does not promise the successful improvement of management. The creation of a database incorporating all relevant data for comprehensive diagnosis should be considered. To be more precise, data on individual SMEs should be gathered to compile the management indices described below. These indices can be used for individual SMEs to pinpoint their managerial status in their respective industry and also for consultants and those involved in SMEs promotion administration to understand the reality of the management of SMEs. The initial publication of these indices every three years is desirable with a view to increasing the frequency of publication in later years.

- ① SMEs Management Indices: general, financial, production and sales indices by business type and business size
- 2 SMEs Cost Indices: manufacturing costs (direct and indirect), detailed sales and administration costs and share of each cost item by business type in the case of the manufacturing sector; sales cost and detailed sales and administrative costs and share of each cost item by business type in the case of the commercial sector; turnover, variable cost, fixed cost and break-even turnover, etc.

(2) Marketing

<Recommendation 2: Promotion of diverse forms of export (OEM and others)>

Future export promotion measures should focus not only on product exports for the sake of export performance but also on actual gains through OEM exports as well as consignment exports.

- (1) OEM (Original Equipment Manufacturer): The Zimbabwean supplier will make products in accordance with the design and the specifications provided by the buyer in RSA or anywhere else (hereinafter called RSA). The products will bear the brand of the buyer. In some cases, production equipment will be brought into the supplier's factory at buyer's cost.
- (2) Export by Consignment: the buyer will supply a portain of raw materials and production equipment. The product will be made at the risk and account of the Buyer. A commission will be paid by the buyer (importer) to the Zimbabwean supplier for the processing work.
- (3) Export by semi-finished product or kit: For example, the Zimbabwean supplier exports furniture to RSA, where the buyer will install metal fittings on the furniture. At present, most of the furniture suppliers in Zimbabwe import metal parts from RSA.

<Recommendation 3: Development of various export systems>

EPZs were introduced in 1996 under the government policy of promoting exports. An enterprise newly established in an EPZ can enjoy the following incentives if it exports 80% of the production value.

- a) Exemption from import duty on capital goods and raw materials
- b) Reduction of corporate tax
- c) Exemption from capital gains tax
- d) Exemption from withholding tax
- e) Exemption from sales tax (25% for general commodities and 25% for automobiles)
- f) Exemption from corporate tax on fringe benefits

There is a call for improvement of the present arrangements because it is risky for SMEs to try to export 80% of the product value and also because the absence of incentives before reaching this 80% quote is unfair. Another fundamental argument is that the preferential treatment of export enterprises operating only in an EPZ is highly questionable. Having assessed the opinions of the competent offices and people concerned regarding these points, the following recommendations are made.

The present system of providing incentives for enterprises exporting 80% of the production value in an EPZ should be revised to the sliding system shown in Table 5-1. The lack of a 70% category is to avoid excessive administration work due to the existence of many categories. In reality, each enterprise should notify the intended export ratio for the coming year prior to the commencement of that year and report the achievement ratio at the end of the year for certification by the competent office.

There is room for further discussion regarding the specific incentives for each category and an example is shown in Table 5-1.

Table 5-1 Export Promotion Measures (Draft)

Export Achievement Ratio	Incentive		
50%	- Exemption from import duty on raw materials		
	- Reduction of import duty on capital goods by 50%		
	- Reduction of corporate tax by 50%		
	- Reduction of sales tax by 50%		
60%	- Above four + c, d and f		
80%	- Current a through f		

The introduction of specific periods for the reduction of corporate tax and sales tax depending on the export achievement ratio (for example, five years after the establishment of an enterprise in the case of 50% or 60% and 10 years in the case of 80%) is also proposed. These restrictions should help to secure future revenue sources for the government and should be regarded as fair practice vis-a-vis exporters operating outside an EPZ.

<Recommendation 4: Rationalisation of the bond systems>

1) Expansion of the Bond System

A bonded area is a place where goods imported from abroad can be temporarily stored without being subject to import duty and other taxes and where the customs clearance of imported or exported goods is conducted. The payment of import duty on raw materials imported for re-export can be avoided through the introduction of such an area. This constitutes the fair treatment of exporters which do not enjoy EPZ-related incentives because they are not located in an EPZ.

The duty draw back system is currently employed in Zimbabwe whereby imported raw materials for re-export are still charged import duty which is refunded when they are actually re-exported. The survey conducted by the Study Team and other surveys found that this system is not properly operating as refund takes as long as seven months and some enterprises are not refunded at all. This situation worsens the cash flow of exporting enterprises and has become a major obstacle to export promotion. As bonded warehouses are already available in Zimbabwe, expansion of the present system in the following manner through a revision of the relevant laws should help to solve the problems.

① Designated Bonded Areas

Designated bonded areas are land, buildings, or other facilities owned or managed by the government, local public bodies, airport authorities or port authorities, etc. and are designed by the competent Minister as places for the loading/unloading, transportation and/or temporary storage of foreign goods to ensure swift and easy customs clearance at airports or ports where a customs office is located. Container yards handling foreign goods are usually designated bonded areas. For the period of storage, the provision regarding the permitted period of storage at a bonded warehouse is applied mutatis mutandis.

(2) Bonded Warehouses

Bonded warehouses are places which are permitted by the head of customs for the loading/unloading, transportation and/or temporary storage of foreign goods, authorised goods for import and goods to be exported. The permitted storage period is two months but approval of the head of customs is required for a storage period exceeding three months prior to the commencement of this extended period.

An application can be made to extend the storage period by a specific length of time in special circumstances.

3 Bonded Manufacturing Warehouses

A bonded manufacturing warehouse is used to process imported goods, to manufacture products using imported raw materials or to conduct refurbishment, finishing and other work for the purpose of re-export. The storage period is usually two years but can be extended by the prior approval of the head of customs. This two year period can be extended for a specific period by application in special circumstances.

④ Bonded Exhibition Display Areas

A bonded exhibition display area is permitted by the head of customs pursuant to the relevant government ordinance as an area for an exhibition or trade fair for the display of foreign goods.

For the proper operation of the above system, strict enforcement of the self-control system of enterprises regarding delivery to and shipment from designated bonded areas and bonded manufacturing warehouses, etc. is necessary. For this purpose, each exporter will be required to accurately prepare a ledger of bonded items and clear guidance should be provided on the obligation to report conversion of the value of imported goods to domestic currency for re-export and to pay the necessary taxes.

<Recommendation 5: Improvement of trade-related administrative capability>

Another problem to be addressed for the promotion of trade without awaiting the introduction of the new system described above is the currently slow customs clearance process. One study has found that customs clearance at airports and ports in Zimbabwe is extremely slow in terms of the time required for clearance and the refund of duty on imported goods for re-export compared to Mauritius, Sri Lanka and Indonesia as shown in Table 5-2.

Table 5-2 Average Processing Time for Selected Bureaucratic Procedures in Zimbabwe, Mauritius, Sri Lanka and Indonesia

Item	Zimbabwe	Mauritius	Sri Lanka	Indonesia
Customs Clearance at Ports	14 - 28 days	4 days	3 - 4 days	4 days
Customs Clearance at Airports	7 - 14 days	2 days	NA	NA
Refund of Duty on Imported Products	12 - 36 weeks	4 - 24 weeks	2 weeks	2 - 6 weeks

Source: Commonwealth firm-level survey for Zimbabwe and Lall and Wignaraja (1997) for Mauritius, Sri Lanka and Indonesia. Data for Mauritius and Sri Lanka are for 1996 while data for Indonesia are for 1995. "Zimbabwe: Enhancing Export Competitiveness", First Draft, December, 1997, Economic Affairs Division, Commonwealth Secretariat

Customs clearance at ports requires some four days in Mauritius, Sri Lanka and Indonesia and requires 14 - 28 days in Zimbabwe in the case of the South African route. There is obviously a difference in that customs clearance in the former three countries involves clearance only once at the port of arrival, while customs clearance at Port Durban in South Africa and customs clearance at the border between South Africa and Zimbabwe is involved in the case of Zimbabwe.

Unless Zimbabwe realises that is inland nature is a disadvantage and introduces a speedy customs clearance procedure, it may lose the competition with not only South Africa but also with such rivals as Botswana, Swaziland and Lesotho.

While the information shown in Table 5-2 does not clearly indicate the customs clearance period in South Africa, customs clearance at airports where air cargoes directly arrive from abroad still takes 7 - 14 days compared to two days in Mauritius (data for Sri Lanka and Indonesia are unavailable), illustrating the slow customs clearance process in Zimbabwe which constitutes a major impediment to smooth trade.

For such seasonal items as apparel samples, the timing of acquisition is particularly important from the point of view of sales. A questionnaire survey conducted by one organization found that the complicated bureaucratic procedure is the joint second impediment to efficient competition together with difficult access and uncertain policies after high interest rates. Efforts to improve the situation must be made with numerical targets in addition to improvement of the procedure's transparency and the dissemination of necessary information to traders.

1) Structural Reform of Textile Industry

The abolishment of the preferential tariff agreement with the Republic of South Africa resulted in the imposition of a high import duty on textile products exported from Zimbabwe to South Africa, almost annihilating Zimbabwe's textile industry. News of the bankruptcy of or major redundancies at large textile enterprises continues to be a topic in Zimbabwe today. In order to improve the situation, negotiations are in progress with South Africa to reduce the relevant tariff by 15%. However, the textile industry in South Africa is suffering from cheap imports from Southeast Asia and Mauritius and there appears to be little prospect for increased imports of textile products from Zimbabwe in the near future.

In the domestic market, loss of the domestic demand due to the import of second-hand clothes for low income families has had a major adverse impact on the operation rate of the textile industry. There is a strong call from the industry for an import ban on second-hand clothes. While the drastic measure of banning such imports should not be introduced from the viewpoint of helping the poor and maintaining Zimbabwe's commitment to the WTO regime by means of market liberalisation and tariff cuts under the ZIMPREST, the introduction of a tariff quota system for the import of second-hand clothes may be worthy of consideration. This system aims at regulating the competition between imported inexpensive products and domestic products. A primary tariff (zero or very low) is applied to imported goods upto a specified volume to protect the interests of consumers while a secondary tariff (high) is applied to imported goods above the specified volume to protect domestic producers. There are two methods of deciding a specific tariff quota, i.e. (i) the first come, first served method where applications are accepted upto the specified import quota and (ii) the prior allocation method where allocation is made based on the import performance in the past. The latter has been accepted under the GATT regime provided that it is not introduced to discriminate against specific countries.

2) Export Promotion of Wood Furniture to South Africa and Other Neighbouring Countries

The survey conducted by the Study Team confirmed the economic viability of wood furniture export to South Africa although improvement of quality levels is required. For the formulation of a future marketing strategy, it is necessary to conduct a survey on the actual conditions of the domestic furniture manufacturing industry and the market conditions of neighbouring countries to set realistic targets. In regard to exports to

South Africa, the existing unofficial industrial association can be used to arrange wide-ranging cooperative relationships, including OEM and consignment production with South African outlets and finishing work in South Africa, etc., to open up a real window of export opportunity. The active provision of information and support by the ZIMTRADE and other organizations will also be required for the successful export of wood furniture.

The preconditions for an improved export performance are better quality and better design. Apart from the use of public development and testing organizations described in the section dealing with metal processing, supporting measures, including, improvement of workmanship through vocational training, will be required.

<Recommendation 7: Better organization and technical advancement of SMEs>

Concrete measures regarding technical advancement, grouping and joint activities as a means to supplement the shortage of managerial resources of SMEs should be considered in relation to the formulation of a total picture of SMEs. There, the discussion focuses on cooperatives.

1) General Conditions

Cooperatives in Zimbabwe warrant special attention because of their excellent functioning. In January, 1996, three female leaders of the cooperative movement in Zimbabwe were invited to Japan by the Japan-Africa Council, a Japanese NGO, and other supporting bodies to deliver lectures on their activities. Many cooperatives are organized in rural areas and started as cooperatives producing jam, coffee, pineapples, honey, seedlings and livestock. In subsequent years, cooperative activities have been expanded to the production of bread, cheese, sawn timber and school uniforms, etc. Umbrella organizations have also been established in the form of councils or federations. Some of these umbrella organizations are engaged in the running of primary schools, night schools for adults, environmental as well as public hygiene issues, training (book-keeping, farm management, dressmaking and leadership, etc.) and the extension of organic farming. They also hold various meetings and seminars, conduct negotiations with the government and NGOs, provide guidance on market research, plan new projects and provide loans.

On its part, the government has been assisting cooperatives by means of purchasing land abandoned by white farm owners and giving it to cooperatives.

The activities of cooperatives have been instrumental in not only increasing the income and improving the social status of women, increasing opportunities for children to attend school, and aiding indigenisation of industries and development of local industries but also in improving managerial abilities through adult training, resulting in favourable changes of the social structure. In view of such positive effects of cooperatives, the government's intensification of supporting policies and measures is highly desirable.

2) Recommendations

The following points are important in regard to the management of and official assistance for cooperatives. The competent ministry at present is the Ministry of National Affairs, Employment Creation and Cooperatives and a newly established cooperative can commence receiving support after converting to a formal sector organization through registration with the ministry.

The existing cooperatives are characterised by (i) their principal location in rural areas, (ii) products of manual work on a small scale as side businesses to farming and (iii) mainly organized by women. In some cases, the socialistic character at the time of establishment has survived and urban-type cooperatives with modern equipment have still to emerge in the coming years.

Active encouragement of the establishment of cooperatives after the example of Japan is necessary to foster SMEs by means of organizing SMEs with scarce managerial resources to improve their market competitiveness. To this effect, it is recommended that the government structure be partially changed so that cooperatives in specific business categories are placed under the jurisdiction of the respective competent ministry instead of centralised control by the Ministry of National Affairs, Employment Creation and Cooperatives. Following this change, cooperatives in the commerce and manufacturing sector should be controlled by the MOIC. This new arrangement is expected to stimulate the development of SMEs together with encouragement for SMEs to form cooperatives under the proposed SMEs Modernisation Promotion Law.

1 Supporting institutions and legislation

Refer to 5.3 (2) Partial reorganization of Competent Ministry of Cooperatives.

Refer to 5.2 (2) Small and Medium Enterprise Modernisation Promotion Law.

② Marketing Assistance

Some cooperatives are said to have developed new products but their businesses have not taken off because of the lack of marketing channels, illustrating the necessity for further assistance by the ZIMTRADE, SEDCO and local consultants, etc.

(3) Financial Assistance

Refer to 5.3-(3) - Cooperative Development Corporation (CDC).

Tying the above elements of the recommendation, the following plan is presented to formulate Cooperative Development Programme (CDP). The plan shows implementation of supporting measures pursuant to SME Modernization Promotion Law (SMPL) as well as networking of CDP. Though not mentioned particularly in the above three elements, the role of local government is obviously emphasized. Local governments are closely located with cooperatives and SMEs and have mutual understanding of the local business environment. (see Fig. 5-5)

5.6 Recommendations for Skill and Manpower Development

(1) Points Considered in Recommendations

Improvement of Vocational Skills

The vocational training system in Zimbabwe, mainly based on school education, is fairly developed as already described in Chapter 4. It is, however, difficult to expect school education to achieve improvement of a whole range of skills to meet the diversifying needs of society today where constant socioeconomic changes and technological progress demand different types of skills from potential workers and technicians.

What is now required of the workforce is a commitment to consolidating their basic knowledge and skills acquired through school education/training and also to learning and improving skills which correspond to new processes and equipment through practical work. Official measures to assist the workforce to improve their practical knowledge and skills are also required.

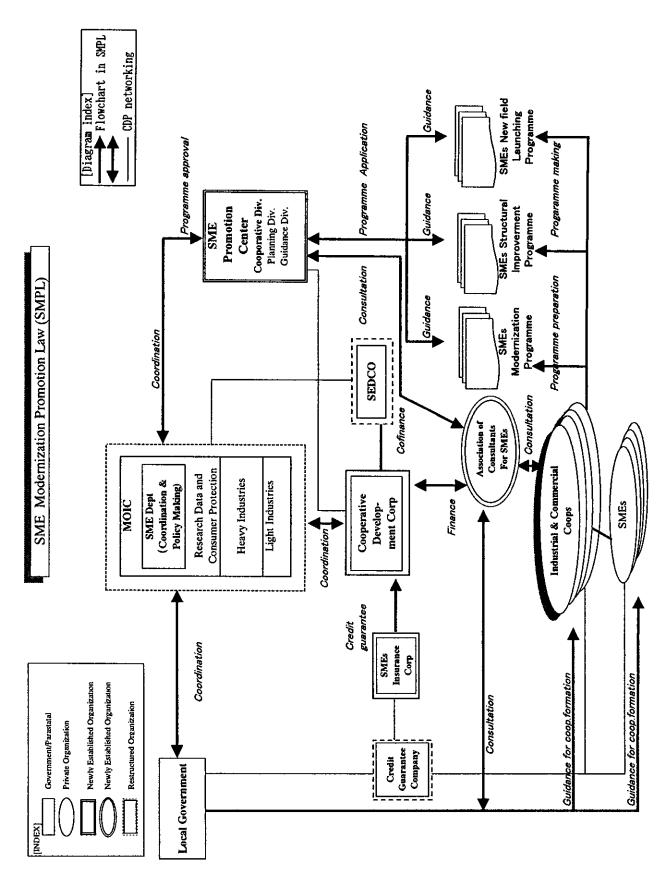


Fig. 5-5 Cooperative Development Programme (DCP)

Even if scholarships and evening courses are available, many people may well find it difficult to benefit from such arrangements because of their overwhelming need to sustain the livelihoods under the severe financial situation or simply because they live in remote areas.

In the face of these problems, it is necessary for people to facilitate the development of their abilities throughout the lives while balancing the so-called off-JT at school, OJT and self-improvement efforts of individual persons. All official measures relating to manpower development must be promoted from this point of view.

To facilitate OJT and self-improvement process for individuals, primary and secondary schools should build up their basic knowledge of mathematics and science as well as providing elementary vocational training. Guidelines for OJT and self-improvement should be prepared for the development of suitable textbooks. In other words, a model should be developed to provide a desirable path for the life-long development of the knowledge and skills of people engaged in specific vocations.

Textbooks are relatively expensive in Zimbabwe, creating a situation in which individual students of polytechnics and vocational training colleges find it difficult to own their own books. In many cases, textbooks and other essential learning materials are kept in a library, etc. under strict control. In the case of school education/training, it may be possible to compensate for the shortage of textbooks by classroom teaching but the provision of inexpensive basic textbooks in essential for self-improvement.

From the viewpoint of encouraging the life-long development of ability, such incentives as skill competitions to encourage self-improvement after obtaining a certificate should prove useful in addition to the awarding of a certificate on the completion of an educational course and trade testing designed to certify the skill level of individual workers at certain stages of their working career.

It is necessary to review from time to time whether or not the existing training facilities and courses are appropriate for each type of business and geographical region. For example, the trade (job type) of sewing machine mechanic is currently the only trade related to the clothing industry which is included in the apprenticeship scheme. Other trades could be added if found to be appropriate. Similarly, trade testing could be expanded to include some trades related to the clothing sector.

The above problems and their possible solutions are summarised below.

- Measures are necessary to assist those who find it difficult to attend formal school education because of financial, geographical or other reasons.
- School education/training cannot address all of the problems. Life-long learning should be encouraged by balancing three factors, i.e. off-JT, OJT and selfimprovement.
- The preparation and presentation of a model plan for life-long self-improvement should prove effective.
- The wide availability of high quality textbooks and other learning materials is desirable to ensure good OJT and self-improvement results.

The case of a vocational training institute (SENATA) in Chile is included in the Appendix 4 as an example.

2) Development of Management Skills

As mentioned earlier, various organizations provide training courses designed to improve business management skills. Although these courses are diverse, many SMEs owners are not aware of their existence because of their busy working schedules. Even when they are aware of these courses, they may not be able to select appropriate courses for their business as well as personal needs.

It is, therefore, necessary to analyse the various training courses on offer and to introduce them to prospective beneficiaries by means of providing information which categorises them in terms of their contents, purpose, level, place and date so that individual beneficiaries can easily access the most appropriate courses.

Meanwhile, the business management guidance provided by consulting engineers plays an important role together with education/training courses for the improvement of management skills. The registered SMEs consultant system was established in Japan in 1952. These consulting engineers diagnose SMEs in association with loans for the modernisation of equipment and may directly visit SMEs on request with a view to identifying their problems on-site and providing advice on improvement measures. If necessary, consulting engineers provide guidance on factory management in terms of production control, equipment control, QC and safety/environmental control for manufacturers.

The self-improvement efforts of SMEs owners should be further enhanced by means of the exchange of information at meetings of official organizations, including national as well as local industry-wide associations of SMEs owners and meetings of SMEs owners in different businesses in a relatively small area, to solve problems which individual SMEs may find difficult to solve and also through voluntary study groups.

The above-mentioned various problems and likely measures to solve these problems are summarised below.

- The provision of coordinated information, including that which provides an entire picture of the diverse courses to develop management skills, should prove useful.
- A scheme should be developed to make it easier for training course participants to apply the results of their training to practical work. In other words, instead of simple classroom lectures, a system which allows the active involvement of participants should be developed.
- Participatory training is particularly important for the education and students who have no practical work experience.
- The introduction of a SMEs consulting engineer system such as that in Japan which provides management as well as on-site production guidance should be considered as a way of assuring the improvement of management skills.
- An organization for SMEs owners to discuss common problems and to motive each other should prove effective to assist the self-improvement of these owners.

An example of management education in Japan is given in Appendix 4.

3) Technical Assistance

Many people in Zimbabwe are engaged in international activities, capitalising on their excellent talent in sculpture, music and other fields. It is common to see people selling their own handicrafts in the street. Also in the manufacturing sector, such innovative products as special bicycles, utensils for daily use and production equipment using readily available materials to suit the present conditions of the country are often observed.

These innovative efforts can lead to competitive products with originality only when backed by basic technologies and confirmation of their competitiveness through comparison with international standards for similar products.

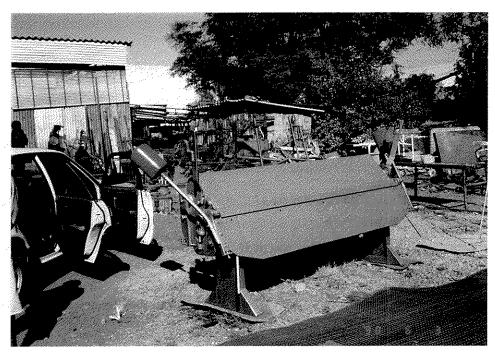


Photo 5-1 Manually Operated Bending Machine

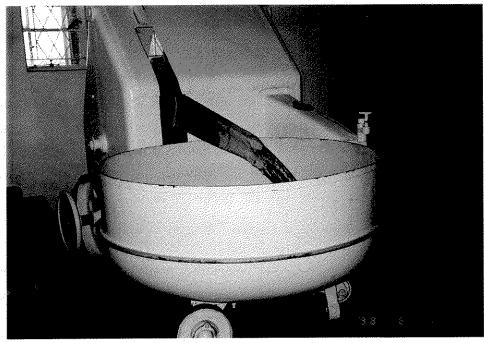


Photo 5-2 Mixing Equipment Designed by the Manager Where the Bowl and Arm Move Separately

While it is essential that SMEs improve the level of basic technologies, the existence of a large technological gap between SMEs and large enterprises is a fact which cannot be ignored. In general, the transfer of technology can be smoothly conducted by subcontracting or the division of labour between SMEs and large enterprises. To facilitate such a relationship, their linkage must promise mutual benefits. For example, even if large enterprises enjoy advantages in terms of technology and all other areas, SMEs should try to develop their own specialty which can compete with large enterprises, thereby earning the trust of large enterprises.

The following technical improvements are required to further enhance the originality of SMEs and to eradicate the technological gap vis-a-vis large enterprises.

- Easy access to a wide range of information regarding technological trends throughout the world
- Design, trial manufacture and evaluation of new products for commercially viable production
- Manufacture of merchandise in the most appropriate manner
- Manufacture of the required quantity of products with the planned quality at low cost with an agreed delivery schedule
- Maintenance of production equipment in the best condition to ensure continual production
- Special characteristic(s) to enable a company, regardless of its size, to deal with others on equal terms

To assist the above technical improvement, the existence of a public testing and research institution is required to conduct the following work.

a) Research

- To cooperate with or to share the burden of R & D activities which SMEs may find difficult to conduct on their own
- To conduct research work entrusted by SMEs

b) Technical Consultation/Guidance

- To provide consultations to find solutions to technical problems and/or to develop technologies and products

- To provide on-site guidance and/or to dispatch technical advisers with rich practical experience

c) Entrusted Laboratory Testing

 To test, analyse and/or measure constituents, quality and precision of materials and products at the request of SMEs

d) Manpower Development

- To accept researchers and engineers, etc. from SMEs as trainees to develop their specialist expertise through joint research
- To provide technical information through seminars, etc.

e) Technical Exchange

- To provide opportunities for technical exchange by means of assisting group activities, study groups and exchanges between different businesses.

As described earlier, the SIRDC has a grandiose plan to expand the range of its equipment and research staff with a view to transferring the achievements of scientific and technological progress to meet industrial needs. The SIRDC is required to accurately establish the nature of the assistance required by SMEs in each industry and to efficiently proceed with its expansion plan, focusing on specific requirements, to play the role of a technology promoter for SMEs.

One of the expected functions of the SIRDC is its involvement in prototype design and manufacture prior to commercial production to materialise new product concepts for SMEs as it may be difficult for SMEs to become involved in such activities because of their limitations in terms of technology and equipment.

(2) Recommendations

The important points for technology and manpower development are discussed in (1) above. The following measures are recommended to solve the problems raised.

1) Improvement of Vocational Abilities

Despite the existence of a well-developed vocational training system in Zimbabwe, there are still many people who find it difficult to receive the education and training they

would like because of financial, geographical and time constraints. The following recommendations are designed to solve such problems.

<Recommendation 1-1: Fair opportunities for upgrading of vocational abilities>

- Review of the secondary school curriculum to consolidate the teaching of mathematics, science and other basic as well as practical subjects and to provide elementary vocational education
- Development of new educational/training methods for people living in remote areas, including mobile schools

Vocational training is not completed in the period prior to actual employment and must be continued throughout life, necessitating continual in-house training as well as the self-improvement efforts of workers. The following recommendations are made from this perspective.

<Recommendation 1-2: Support for life-long skill development through OJT and self-education>

- Preparation of a map detailing the skills required for each type of job and class for use as a guideline to improve vocational abilities (skills) through OJT and self-education (See Fig.5-6)
- Spread of inexpensive and practical textbooks
- Development of a skill competition to encourage the further improvement of skills after the awarding of a certificate

Sector		000000					
	New Emplo Worl	oyed	Skilled Worker	Supervisor	Technician	Engineer	Manager
Manufacturing Skills	××× ×××	××	×××× ××××	××××	××××	××××	××××
Technology	××	××	××××	××××	××××	×××× ××××	×××× ××××
Management				××××	××××	×××× ××××	×××× ×××× ××××

Fig. 5-6 Concept of Map for Job Skill Development

2) Development of Management Skills

OJT, off-JT and self-improvement are also important for the development of management skills and, therefore, the following recommendations are made.

- <Recommendation 2-1: Practicality of training courses>
- Development of courses which do not only rely on one-sided lectures but which stimulate the trainees to participate, think, discuss and cooperate to produce positive results
- Development of a system which allows prospective trainees to search all courses designed to improve managerial abilities by reason for attendance, course contents, level, duration and venue, etc. so that trainees can select the most appropriate course for their needs.
- <Recommendation 2-2: Provision of travelling guidance by qualified consultants to ensure effective guidance on site>
- <Recommendation 2-3: Creation of opportunities for joint study or discussion by SMEs owners to assist their self-education efforts>

(3) Support for Technical Upgrading

As described earlier, the SIRDC is systematically dealing with the task of consolidating research facilities and manpower development, The SAZ also has a long history in this field and has greatly contributed to the industrial circle in terms of standardisation, testing and measurement.

The following recommendations are made to facilitate efficient R & D activities which demand large funding and manpower in order to support the technical upgrading of SMEs.

- <Recommendation 3-1: Examination of a system under which technical and research institutions in Zimbabwe and the SADC cooperate and share the work, utilising their own characteristics>
- <Recommendation 3-2: It is recommendable for an R&D institution, such as SIRDC, to be assigned to the duty support advancement of technology of SMEs. Namely, attaching to the above institution, it is recommended to establish of a center which plays a role to support SMEs solving</p>

their technology problem and developing their new technology and commodities. For this purpose it will be needed to enrigh talented persons and equipment.>

There have been many cases where lingering problems on the production floor are attributed to surprising causes by well-experienced experts. The maximum assistance of both domestic and foreign experts should be sought. The following recommendation is made to upgrading and maintain the technical level of SMEs.

<Recommendation 3-3: Creation of a travelling guidance system for SMEs by experts well-experienced in manufacturing>

Given the advantage that everyone understands English, it should be relatively easy for Zimbabwe to have access to global information, most of which is available in English. Apart from R & D institutions, a place for meetings of SMEs owners can be used as an access point and, therefore, the following recommendation is made.

<Recommendation 3-4: Creation of a system where SMEs have easy access to technical information >

Manpower development training/guidance and technical development measures incorporating the spirit of the above recommendations have already been partially implemented by related ministries and institutions, such as the BESA, SEDCO and SIRDC, etc. For the systematic implementation of these recommendations, however, the use of the department assigned to plan and implement SMEs promotion policies, which is recommended to be created within the MOIC as a central organization, is strongly advised so that the implementation priority of recommendations can be determined together with the step-by-step development of the necessary legal framework and clarification of the responsible body for the implementation of each recommendation to ensure their actual implementation. For these purposes, it will be necessary to learn more about the experiences of industrialised countries in regard to the formulation and implementation of SMEs promotion policies/measures and also to consider inviting suitable experts as advisors.

5.7 Recommendations Regarding Financial Policies

When the macroeconomy of Zimbabwe suffers, causing a tight money market and widespread reluctance on the part of financial institutions to make loans, SMEs will be the first to suffer. To avoid the occurrence of such a situation, a special financial institution(s) which is friendly to

SMEs is required. In addition, it is also necessary to secure funds designated for the financing of SMEs. As SMEs are economically weak compared to large enterprises, it is a common phenomenon throughout the world for the mortality, i.e. bankruptcy or business closure, of SMEs to be generally high even under a normal economic situation. This tendency is sharply manifest during a recession.

As stated in 5.3, the establishment of a special financial institution with the character of a mutual help cooperative for SMEs and the development of a credit supplement system are necessary to rectify the unfavourable conditions surrounding SMEs. To be more precise, the establishment of new credit guarantee corporations and a credit insurance corporation which will make substantial payments in the case of bankruptcy are recommended as part of the overall development of the institutional set-up to support SMEs promotion policies and measures. As these institutions are essential to rectify the shortcomings of the present set-up, they should be established as soon as possible.

In reality, however, several hurdles must be cleared before the establishment of the above institutions, meaning that the process of establishment will be a fairly lengthy period. Because of this and the current situation of SMEs in Zimbabwe, the following immediate actions are recommended to improve or consolidate the present set-up.

<Recommendation 1: Expansion of the scope of loans for SMEs>

- Use of the counterfunds for BP support under foreign aid to provide long-term, low interest finance for the modernisation of equipment and consolidation of the capital base of SMEs
- The Apex Unit of the RBZ to be a possible provider of the above finance
- <Recommendation 2: Improved lending method for SMEs (group lending)>
- Further promotion of group lending which is already practiced by the SEDCO and others on a minor scale
- Active use of loans, combining training and lending, which is also practiced by the SEDCO and others on a minor scale
- <Recommendation 3: Expansion of the guarantee function of the CGC to support the creditability of SMEs>
- Increase of the capital to expand the guarantee coverage to more than 50%

- Possible introduction of a credit insurance system to avoid the risk of bad debts
- Provision of a credit guarantee for loans provided by the SEDCO and others for SMEs

<Recommendation 4: Strengthening of the functions of bodies responsible for comprehensive policy coordination>

Regular liaison meetings between the bodies responsible for financial administration (such as the MOF and RBZ) and financial institutions (ZDB, SEDCO, CGC and VCCZ) as well as the MOIC which is responsible for the promotion of SMEs promotion policies should be held to discuss desirable arrangements for the financing of SMEs and the conformity of foreign aid and domestic policies regarding the promotion of SMEs.

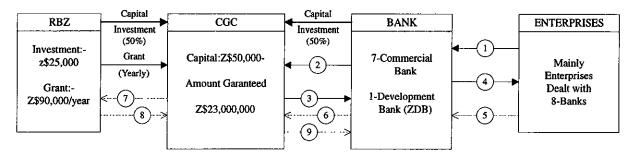
There are many ways of materialising recommendations 1 through 3 shown above and Fig. 5-7 shows one tentative plan. What must be noted here is that for the present system as well as the tentative plan in which the CGC plays a central role, the RBZ essentially functions as an insurance institution for loan default.

Given the fact that it is asking too much for the RBZ, i.e. Zimbabwe's central bank, to fulfill such a function, it appears worth considering (i) the establishment of an independent rinsurance function in the form of a SME insurance corporation by extending the credit supplementation system and (ii) the improvement of the financial system by means of establishing a credit insurance function specialising in SMEs and the autonomous as well as mutually supporting financial institutions recommended in Chapter 5.3. Consequently, the implementation of a detailed feasibility study on these issues is recommended.

Meanwhile, Fig. 5-7 shows the present system and concept of measures to strengthen the system. Based on the understanding that special attention must be paid to the problems of the present system and the characteristics of measures to strengthen it, "Notes on the Establishment of Specialised Credit Supplementation System for SMEs" is provided for further explanation of the issues involved. These Notes and Fig. 5-8 Options 1 through 3 also describe the principal characteristics of the planned expansion of the credit supplementation system and desirable implementation methods.

Needless to say, administrative as well as budgetary assistance will be required for the implementation of the above recommendation.

(1) Present Scheme



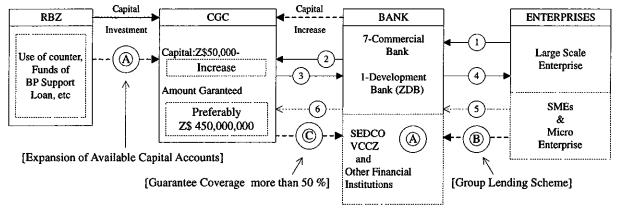
Process Flow

- ① Application of Loan ② Application of Guarantee ③ Approval of Gurantee
- 4 Gurantee backed Loan 5 Default 6 Requeset for Guaranteed Payment
- 7 Request for Compensation 8 Compensation 9 Payment of Guaranteed Money

Problems at Present System

- 1. Beneficiaries are limited to Loan Applicants through 8-Banks only.
- 2. Guarantee is convered 50% of Loan Amount, and eligible for those approved by CGC's Board.
- 3. Payment to Banks is made only when compensation is carried out by RBZ, since no fund is reserved for payment.

(2) Recommendation (Refer Chapter 5.7)



Points Recommended (Refer Chapter 5.7)

- A. Expansion of Available Capital Accounts through paticipation of New Shareholders and use of Counter Fund of BP Support Loan, etc (If Possible)
- B. Improvement of Lending Method Group Lending
- C. Expansion of The Guarantee Function Guarantee Coverage to more than 50% (Preferably 75%)

Points to be Improved

- 1.Beneficialies will enlarged to the clients those who are related with New Shareholders.
- 2.Default Rate will be reduced by application of Group Lending Scheme.
- 3. Payment of Guarantee Money will be expedite by increase of Fund Available
- 4.SMEs Activites will be encouraged by increase of Guarantee Coverage.

Fig. 5-7 Recommendation on Improvement of Present Finance Scheme

Notes on Establishment of Specialised Credit Supplementation System for SMEs

1. Problems of Current System

Fig. 5-7 shows the current system and the concept of its strengthening measures but several problems as described below can be identified.

- 1.1 As the shareholders of the CGC are financial institutions, including commercial banks, there is a question in regard to the fairness and neutrality of the decision-making mechanism for the provision of loans and/or credit for SMEs (a structural shortcoming in that the shareholders are the beneficiaries).
- 1.2 While the central bank has a credit insurance function, it is questionable whether or not it is appropriate for the central bank to fulfill such a function. (Note: In Japan, the Small Business Credit Insurance Corporation was established in 1968. Previously, the central government directly underwrote insurance using its special account.)
- 1.3 Because of insufficient collateral assets and personal creditability, SMEs find it difficult to raise funds from financial institutions, including commercial banks.

Recognition of these problems has led to the proposal of the fundamental improvement of the SMEs financing mechanism and the introduction of a credit supplementation system in Chapter 5.3 of the main text to solve these problems based on Japan's experience.

2. Characteristics of Proposed System

The proposed system has the following characteristics.

- 2.1 The shareholders of the credit guarantee company to replace the CGC are such public organizations as the central government (RBZ) and local governments so that the neutrality, transparency and fairness of the decision-making process can be assured (solution to Problem 1.1 above).
- 2.2 The establishment of a SMEs insurance corporation means an independent insurance function from the central government (RBZ) to facilitate speedy decision-making and the smooth functioning as well as maintenance of the insurance function (solution to Problem 1.2 above).

2.3 The establishment of an independent and mutually supplementary financial institution specialising in SMEs finance should lead to the establishment of a financial system which is easy to access by SMEs and which will pave the way for small business owners to fully perform their obligations as borrowers independently or jointly (in the form of a mutual society) to reduce the default rate (solution to Problem 1.3 above).

3. Implementation Steps (see Fig. 5-8)

Option 1

Firstly, a small, experimental financial institution (mutual association) specialising in SMEs will be established. The present credit guarantee and insurance functions of the CGC will be modestly strengthened.

- 1.1 A public invitation to become mutual association members will be made.
- 1.2 The mutual association members will be local individuals or SMEs. Each member will be asked to make a contribution and will have one vote at the general meeting (voting rights will not depend on the contribution amount).
- 1.3 The mutual association will lend money to its members upto the amount of the actual contribution plus deposits (mainly in the form of time deposits). If the savings situation of a regular savings account if favourable, however, the lending limit will be raised to the maturity value of the said account. (For example, if regular savings are made for two years with a maturity period of three years, lending upto the three years savings amount can be made using the past savings as collateral.)
- 1.4 In principle, group lending and group guarantee based on mutual guarantee will be practiced. It will be appropriate not to seek the guarantee of the CGC as this would be practically impossible for the CGC.
- 1.5 Deposits can be made by SMEs and individuals in other areas.
- 1.6 The prospect of receiving assistance deposits by the SEDCO which provides guidance and financial institutions will be discussed.
- 1.7 Except for the SEDCO, no assistance in terms of public funding or guarantee will, in principle, be considered.

- 1.8 The management of surplus funds arising from the deposits received will be decided based on guidance provided by the SEDCO (to ensure safe management).
- 1.9 The membership size will be around 500 to start with (to be decided by the F/S).
- 1.10 Contributors: local individuals and SMEs

Borrowers: mutual association members. Lending will be made based

on the principles of group lending and group upto the deposit amount which can be used as collateral.

Government funding will not be relied on.

Depositors: no restriction

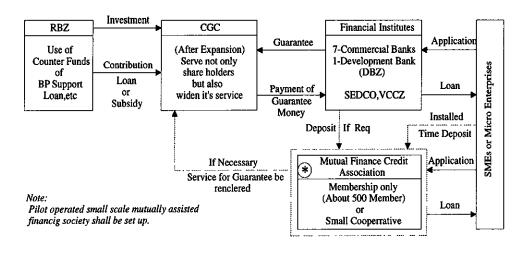
□Option 2

The insurance function will be made into an independent function with the aim of establishing a SMEs credit insurance system. In this case, the implementation of Option 1 as a precondition is preferable.

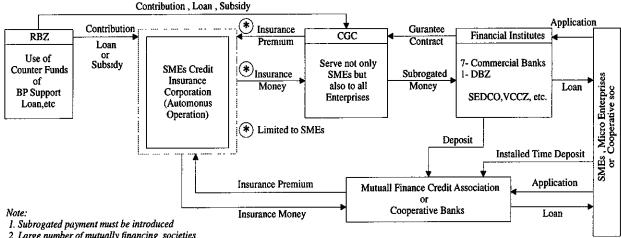
□Option 3

Together with the establishment of a financial institution specialising in SMEs (Option 1) and an insurance corporation (Option 2), a SMEs credit guarantee company will be established. In this case, while the transparency and fairness of the loan decision-making and the provision of guarantee are ensured, there is a shortcoming of overlapping functions between the new company and existing CGC. If the extension and reform of the CGC's functions can achieve fair decision-making, the implementation of Option 3 is less significant.

Scheme: Option 1



Scheme: Option 2



2 Large number of mutually financing societies will become beneficiaries of insurance scheme

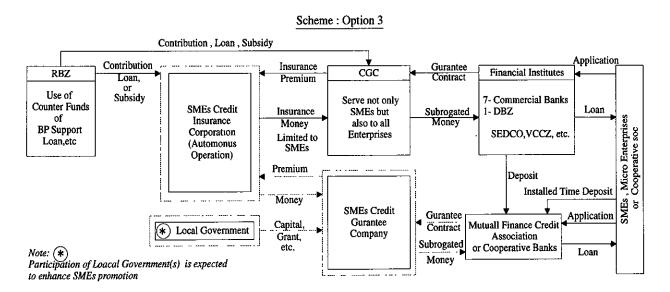


Fig. 5-8 Future Option on Creation of Specialized SMEs Credit Supplement System

5.8 Recommendations for Promotion of Four Priority Industries (Action Plans)

The problems faced by the four priority industries and measures to solve them are outlined below from the technical aspect.

- a) Production control techniques (quality control, cost control, process control and factory control, etc.) noticeably lag behind the times. These techniques should be urgently improved in view of better competitiveness, particularly for export (metal processing, textile and furniture industries).
- b) In the small domestic market, SMEs are exposed to severe competition from large enterprises. SMEs must meet the following challenges for their own survival.
 - Improvement of design techniques to localise and differentiate their products
 - Development of new products to create new markets
 - Maintenance of quality through the improved skills of workers
- c) In general, equipment deterioration is noticeable and equipment maintenance is inadequate. The local production of mechanical equipment and parts must be promoted together with efforts to establish machinery specifications, i.e. standard use of such specifications across the country, and to both rationalise and simplify the equipment maintenance processes.

The recommendations described in the next section onward have been compiled to solve above problems a) and b) while taking the situation of each industry into consideration. As problem c) is deemed to be a fundamental problem for the machine and metal industries, it should be solved as soon as possible. For this purpose, the implementation of a project to establish a prototype design and production centre is separately recommended to facilitate the local production of hitherto imported machinery and parts (see Chapter 6).

5.8.1 Action Plan for Metal Processing Industry

- (1) Profile of Metal Processing Industry
 - 1) Products

Steel products are classified as heavy industrial products and light industrial products. The most typical local products in Zimbabwe are shown in Table 5-6.

- Heavy industrial products: many are imported but some structural steel, accessories and maintenance parts, etc. are locally produced by large enterprises
- Light industrial products: mainly produced by SMEs using in-house technologies

Table 5-6 Metal Processing Products in Zimbabwe

Product Category	Typical Products (Including Spare Parts)		
Plant Equipment	- Equipment for cement plants, boilers for thermal power generation, various industrial plant and storage facilities		
Vehicles	- Railway wagon, mining ore transportation wagons, trailers and lorries, etc.		
Machinery	- Mining machinery, agricultural machinery (tractors and others) and sugar mills, etc.		
Pipes	- Large diameter welding pipes, ducts, stacks and tanks, etc.		
Building/Construction	- Window frames, door frames, house fittings, steel frames for buildings and water tanks		
Agricultural Tools	- Spades, hoes, scotch cars and wheel barrows		
Daily Use Products	 Metal furniture, pans, kitchen utensils, bath tubs, hospital fittings and fixtures, office furniture, school furniture, food processing equipment, safes and panel boards, etc. 		

2) Markets

Most sheet metal processing products are marketed in the domestic market. Some enterprises have been trying to export to the SADC area but the export volume is less than 10%. Meanwhile, as the overall domestic demand is limited, neither large enterprises nor SMEs have a bright future in terms of their development if the present situation persists. Some large enterprises have expanded their order books by producing hitherto imported products and SMEs are trying to find their way by competing with large enterprises or seeking niche markets.

3) Raw Materials

The supply of raw steel materials is relatively steady as they are imported from South Africa and are also supplied by the ZISCO. The latter can only supply ordinary small bars and sections. Sheet metal, thick plates, large sections and special steel, etc. are all imported. In such large cities as Harare and Bulawayo, steel suppliers have certain stock for prompt delivery.

4) Production Technologies and Equipment

None of the automated machinery or robots observed in technically advanced countries is currently used in Zimbabwe as manually operated machinery is predominantly used. In the case of welding, CO₂ semi-automatic welding machines and TIG welding machines are widely used.

<Large Enterprises>

- Large enterprises have their own in-house design section and CAD is used by some enterprises.
- Most of the production equipment was installed 5 10 years ago and is well maintained. Some enterprises have automated machinery, such as NC lathes and machining centres.

<SMEs>

- SMEs do not have an in-house design section and products are made to suit customer specifications or copy examples.
- The production equipment is generally old and its maintenance is inadequate. The absence of ceiling cranes and transportation equipment means that products on the shopfloor have to be moved manually.

5) Workers

Highly committed workers with a higher educational background than compulsory education work under the supervision of skilled workers. They conduct their work honestly. A five day working week is the normal working pattern. Large enterprises have a well-established labour safety and hygiene control system but this is not the case with SMEs.



Photo 5-3 Work Scene

(2) Casting Industry

1) Size of Industry and Products

There are some 45 casting enterprises in Zimbabwe, employing some 6,000 workers and producing an annual volume of some 110,000 tons. Twelve enterprises are large enterprises with 100 or more employees while the remainder are SMEs.

While there are such products for daily use as pans, bath tubs, water taps and locks, most products are important components of industrial machinery, building and building services, making the casting industry an important supporting industry for the machine industry. As castings are frequently traded in the form of machined products or semi-assembled products, many enterprises tend to have their own machining equipment. As a result, machining is seldom subcontracted. Typical castings produced by casting enterprises in Zimbabwe are shown in Table 5-7.

Table 5-7 Typical Castings Locally Produced in Zimbabwe

Product Category	Typical Products (Including Spare Parts)
Railway Components	- Wheels for passenger cars and freight wagons and connectors, etc.
Mining Machinery	- Ore crusher components: mill-liners, mill-balls and stroke boards, etc.
Components	- Ore transportation vehicle components: wheels and bearing boxes, etc.
Agricultural Machinery Components	- Tractor components, irrigation pumps and water sprinklers, etc.
Machine Components	- Counterweights, flywheels and mill-rolls, etc.
Vehicle Components	- Brake drums and brake shoes, etc.
Plumbing Components	- Valves/elbows/joints, cast pipes, manhole covers and fire-plugs, etc.
Daily Use Castings	- Water taps, showers, metal fittings for drainage, bath tubs, pans and agricultural tools, etc.

In general, the demand for castings at the early stage of industrialisation tends to be restricted to casting for daily use products, such as pans and agricultural tools, and these are produced in small quantities using traditional methods.

The importance of the casting industry as a supporting industry for the machine industry rapidly increases with the advancement of industrialisation. In most African countries where the process of industrialisation is still at an early stage, there are few casting enterprises. Zimbabwe has a relatively large number of casting enterprises because of its relative progress of industrialisation among African countries.

South Africa: 100 enterprises
Zimbabwe: 45 enterprises
Egypt: 40 enterprises
Nigeria: 26 enterprises
Tanzania: 26 enterprises

2) Raw Materials and Energy Supply

The main raw materials required by the casting industry are shown in Table 5-8.

Table 5-8 Main Raw Materials for Casting Industry

Raw Metals	Pig iron, steel scrap, alloy steel, copper, zinc and tin, etc.
Refractory Materials	Refractory bricks and high class heat-resistant lining materials for melting furnaces
Cast Materials	Moulds to produce metal moulds, casting sand to produce sand moulds and sand binders
Energy	Electricity and coke

While the supply of domestically produced raw materials is fairly steady, it is difficult to obtain such imported materials as high class heat-resistant lining materials and special sand binders.

3) Quality Control, Production Technologies and Production Equipment

Large enterprises have their own quality control system and testing as well as inspection equipment to conduct the necessary testing and inspection in the casting process. SMEs do not have such equipment and only visual inspection is conducted. The testing and inspections listed in Table 5-9 are essential to guarantee the quality of products, especially that of machine components. This is the reason why SMEs have been unable to manufacture machine components.

Table 5-9 Necessary Tests and Inspections for Casting

Subject Issue	Testing/Inspection
Chemical Components Analysis	Analysis of the chemical components of raw materials, molten and products
Mechanical Properties	Tensile and hardness testing, etc.
Accurate Dimensions	Dimension and shape testing
Casting Defects	Surface inspection and internal inspection (non-destructive testing)

Although devoid of state-of-the-art technologies, large enterprises have either developed or imported suitable technologies for their operation in addition to basic casting technologies. Old equipment is well maintained and operating well.

In the case of SMEs, production is heavily depending on empirical methods and manual work and modern industrial production centering on machinery is not conducted. Inappropriate production equipment and methods cause low productivity as well as defects in terms of product dimensions and quality. The insufficient application of basic casting technologies and the shortage of funds have made it difficult for SMEs to improve their equipment or methods and low quality products appear to be the production norm.

4) Workers

The casting process is very complicated and requires much experience. It also involves heavy physical work under high temperatures and dust. The high wage level currently

attracts workers from other industries. Inexperienced workers are given instructions by skilled workers and the work morale appears to be high.

At large enterprises, qualified engineers and supervisors solve problems related to quality control and production control. The shortage of qualified engineers makes it difficult for SMEs to solve similar problems, resulting in low productivity and the production of low class products.

Large enterprises are well aware of the need for labour safety and hygiene control. This is not the case with SMEs.

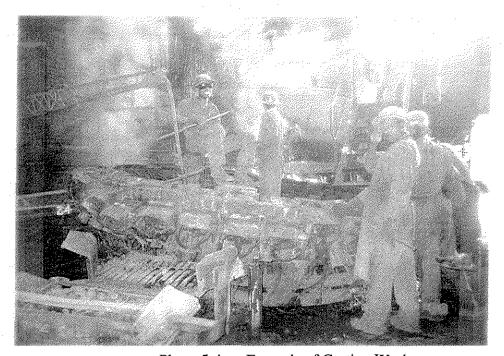


Photo 5-4 Example of Casting Work

(3) Action Plan Targets

After South Africa, Zimbabwe is the only industrialised country in the region. The development of infrastructure and domestic industries produce a demand for processed metal products, centering on machinery. At present, most of these products are imported. The country's worsening economic situation makes it difficult for enterprises using imported machinery to renew their equipment or to import the necessary spare parts.

In order to rectify the situation, the domestic production of hitherto imported processed metal products for the stable supply of machinery and parts is necessary. In other words, the

localisation of imported machinery and parts should be the pillar of the strategy to promote the casting and other metal processing industries. Table 5-10 shows those processed metal products of which the stable supply is essential in Zimbabwe.

Table 5-10 Processed Metal Products Requiring Stable Supply

User Field		Equipment Type	Typical Products (Including Spare Parts)	
	- Coal	- Drilling	Drills, bulldozers and buckets	
	- Iron Ore	- Grinding	Grinding mills and crushers	
	- Chrome Ore	- Transportation	Ore transport wagons and conveyors	
Mining	- Limestone, etc.	- Multi-Purpose	Drainage pumps and compressors	
	- Cement		Equipment for cement plants	
	- Metal Refining		Refining plant/conveyors, refining furnaces, ladles, platform cars and cranes	
	- Fertiliser Production		Fertiliser plant equipment	
Agriculture/ Stock Raising	- Agriculture	- Ploughing	Tractor accessories/hoes, fertiliser applicators and seeding equipment	
Kaising	- Stock Raising	- Transportation	Tractors and pallets	
		- Storage	Tanks, silos and various containers	
	- Tobacco	- Transportation		
	- Coffee	- Storage		
Food	- Grains	- Grinding	Relevant equipment and accessories	
Processing	- Meat	- Drying		
	- Fruit and Vegetables	- Processing		
	- Construction	- Houses/Buildings	Structural steel, verandahs, window frames, door frames and kitchen equipment	
		- Water Supply and Sewerage	Valves, elbows, joints and manholes	
		- Pipe Line	Pumps, valves and various metalware	
Social	- Electricity	- Generation	Generating plant equipment and structural materials	
Infrastructure		- Transmission	Pylons, poles and distribution panels	
	- Transport	- Automobile	Automobile parts and trailers	
		- Road	Pedestrian guardrails, pedestrian bridges and multi- level crossing structures	
		- Railway	Passenger cars, freight wagons and rail crossing structures	

(4) Action Plan

The action plan designed to achieve the basic strategy described above will consist of the following three programmes.

- Programme 1: Improvement of Production Control Techniques
- Programme 2: Improvement of Design Techniques and Processing Technologies
- Programme 3: Promotion of Linkage with Other Enterprises

<Programme 1: Improvement of production control techniques>

The precondition for "a stable supply to meet the domestic demand" is competitive quality, price and delivery date vis-a-vis imported products. Manufacturers must maintain the required quality, complete products by the required delivery date and reduce the cost to fight off the competition.

Many SMEs surveys in the past have found production control to be virtually non-existent except for checks on the quality, cost and delivery date when products were actually completed. Improvement of the present situation in which the product quality, etc. is unknown until completion to a situation in which the production of good quality products is completed by a predetermined date at a target cost is necessary through the improvement of production control techniques.

1) Learning of Necessary Production Control Techniques

a) Education of Factory Managers

- Education and guidance by public or private educational institutions

Education Course	Subject	Period
- Production Control Course	Factory Manager	3 - 6 months
- Cost Control Course	66	"
- Quality Control Course	44	٤,
- Maintenance Course	"	66

b) On-Site Guidance by Experts

- Clarification of the factory control functions and responsible section
- Clarification of control system and introduction of control books
- Clear understanding of the flow of production processes and production capacity of each process by factory managers

2) Introduction and Operation of Production Control System

- Employment of PDCA (Plan-Do-Check-Action) cycle consisting of planning, production, evaluation and improvement
- Use of tables and charts for visual understanding of the production performance

3) Improvement of Production Control System

- Review and rationalisation of the control system
- Introduction of computers and use of computer control software

4) Evaluation and Guidance by Third Party

- Diagnosis, evaluation and guidance by experts

<Programme 2: Improvement of design techniques and processing technologies>

Many SMEs surveys in the past have found that products are made relying on copies and previous experience. Plant and machine components must be capable of maintaining their performance and must be interchangeable. To produce such components, they must be designed so as to perform the required functions instead of reliance on the copying of existing products. In addition, appropriate production equipment and work arrangements are necessary for the efficient production of products which meet the required quality.

In view of these requirements, the establishment of a design, prototype development and testing centre at a government organization to be responsible for product design to promote localisation is recommended.

1) Training of Engineers

- Education and training through a design engineer training course
- Dispatch or temporary assignment of engineers to large enterprises to assist their production activities
- Training at the manufacturers of imported machinery (overseas training)

2) Product Design and Product Development

- Guidance and assistance by the design, prototype development and testing centre
- Understanding of the basic functions of machines and components
- Preparation of machine/component drawings and revision/standardisation of drawings
- Diffusion of shop drawings and specifications of imported machinery/components and their revision

3) Implementation of Testing and Inspection

- Testing/inspection of the quality requirements specified by QC sheets, etc.
- Implementation of testing and inspection: testing and inspection by the design, prototype development and testing centre to ensure speedy testing and inspection as

the existing testing and inspection facilities of the SAZ and universities are inadequate

- Entrustment of testing and inspection to large enterprises through a tie-up scheme
- Consolidation of in-house testing and inspection facilities

4) Improvement of Production Equipment and Use of Subcontractors

- Invitation of technical experts for diagnostic purposes and to the design, prototype development and testing centre for guidance
- Proper maintenance and improvement of production equipment to maintain and improve the product quality and production capacity
- Introduction of production equipment required for the manufacture of new products only after the positive investment effects are ascertained by cost calculation
- Use of subcontractors if the investment effects are not positive

5) Skill Training for Workers

- Improvement of the skill standards by means of technician training courses and skill certification system
- Processes requiring particularly advanced skills
 - Welding of thick plates and special materials
 - High precision machining and finishing (metal moulds, bearings and gears, etc.)
 - Measurement of precise dimensions and shapes
 - · Pattern making of casting
 - Moulding of casting moulds

<Programme 3: Promotion of linkage with other enterprises>

SMEs surveys in the past have found that all SMEs show a tendency to complete all production processes in-house without any division of work. Large enterprises have also been found to have a negative response to the idea of subcontracting the production of parts. For those large enterprises planning to localise the production of hitherto imported plant and machinery, the fastest way is to conclude a technical cooperation agreement with a foreign manufacturer. A licensee can obtain both work and technology from a licenser. If subcontracting by licensees is promoted, SMEs will be able to obtain work and technologies.

In this case, SMEs with limited funds and limited production capacity can expand their product range and improve their operation rate as well as productivity by specialising in specific parts/components for machines using their own technological specialities.

The division of work in industrialised countries has progressed to the point that general enterprises, i.e. large enterprises, mainly conduct assembly and installation while SMEs specialise in casting, forging, machining and welding, etc. as subcontractors of large enterprises. This clear division of work between large enterprises and SMEs has not yet been developed in Zimbabwe.

The development of linkage between enterprises is highly desirable for the development of the metal processing industry as a whole and for the promotion of SMEs. The government should strongly encourage the localised production of hitherto imported machinery and machine parts and subcontracting to SMEs.

1) Subcontracted Production for Large Enterprises

In principle, subcontracting is actively employed by enterprises to rationalise their production activities. In Zimbabwe, however, a subcontracted production system has not been developed because of historical reasons and should, therefore, be promoted by the government.

The government should encourage a subcontracted production system where large enterprises are engaged in the processing and assembly of heavy, thick, long and/or large products while SMEs are engaged in the processing of light, thin, short and/or small products and receive technical guidance from and product inspection by large enterprises.

2) Division of Production Between Enterprises and Grouping of Enterprises

The following measures should be introduced to facilitate the division of production between enterprises and the grouping of enterprises.

- Creation of a database regarding the products and processing capacity of SMEs and public access to this database
- Concentration of specialist enterprises in industrial parks, etc.
- Grouping of enterprises and encouragement of joint business activities, order acceptance, procurement and information gathering, etc.

It is likely that the implementation of the above three programmes will require some time. The completion of the action plan involving the three programmes in 3-5 years should be aimed at.

5.8.2 Action Plan for Food Processing Industry

(1) Profile of Food Processing Industry

1) Entry of SMEs into Flour Milling and Other Business Fields

The deregulation in 1993 created the opportunity for many SMEs to enter the maize flour milling industry which had been monopolised by such large enterprises as Midlands Milling, National Foods and Ribbon Foods. Most of these SMEs have a small grinder, producing some several tons of flour a day. This trend has been accelerated by the promotion of small food businesses in remote villages with the assistance of the UNIDO and other aid projects. However, many SMEs are struggling with a shortage of working funds, resulting in difficulties in obtaining a steady supply of raw materials and procuring machine parts. This is one factor which has impeded the entry of more SMEs into this field. In addition, there is only limited scope for business development as activities at present are largely restricted to the grinding of maize.

SMEs have also entered the vegetable oil refining field, particularly the expression of sunflower oil, even though the refining technology is still inadequate. The entry of SMEs to the beer industry is also observed for the production of traditional local beer containing grains.

In the field of secondary processing products using flour, such local SMEs as bakeries are operating using raw materials supplied by large enterprises or imported.

The overall picture, however, is that the entry of SMEs into new business fields is still only on a very minor scale.

2) Current Conditions of Tinning and Drying

Tinning is largely dominated by large enterprises except for a small number of SMEs which are run by white people. One reason for this appears to be the fact that domination of the distribution channels for processed products by white people is blocking the distribution of the products of SMEs run by indigenous people.

The business operation of Cairns Foods, a large enterprise in this field, is described below for reference purposes.

<Cairns Foods>

- a) Cairns Foods was established in 1929, entered the food processing industry in the 1970's and has the following four divisions.
 - ① Tinned products (tomato sauce, processed tomato products, marmalade, jams, vegetables and fruit)
 - ② Snacks and cereals
 - 3 Grocery
 - 4 Winery
- b) The total turnover of the group is Z\$ 560 M a year, of which some Z\$ 400 M (70%) (approximately ¥3.2 B: at Z\$ 1 = ¥8) comes from the food processing business.
- c) The number of employees is 1,200.
- d) Heinz and other enterprises are local competitors in the food processing business.
- e) It has obtained ISO certification and the technical standards are high.

The Study Team visited two medium-scale enterprises run by white owners in Mutare. Both of these have links with large enterprises as they act as subcontractors for Heinz and Cairns Foods.

In the field of dry foods, some SMEs are seeking to produce specialist local products. For example, a cooperative in Murewa, which is adjacent to Mutoko, is producing sun-dried tomatoes, rape and mangoes, etc. The production volume of sun-dried tomatoes is 1.8 kg a day (36 \cdot 50-gramme bags). The dry unit can accommodate upto six trays at a time and there are six tent-like units consisting of a wood frame and plastic sheet cover (a floor area of some 2 m \times 1.2 m each). This cooperative which was established in 1997 appears to be very forward looking and already has the blue-prints for a new factory.

There is a large joint venture with a Dutch company in Harare. This joint venture was established in 1997 and operates a large factory equipped with a belt conveyor-type hot air dryer and other modern systems. The current daily production volume is 800 kg. Assuming 300 workings days/year, the annual production volume is 240 tons although

the full capacity is 1,500 tons/year. At present, it employs 350 workers and plans to increase this number of 2,500 when full capacity production commences.

In addition to the above two examples, fruit drying activities in Headlands and Mhangura, etc. are reported but both large enterprises and SMEs are novices in this field.

In general, the entry of SMEs into new business fields is observed in the flour milling and other fields requiring only simple machinery/systems and is not evident in many other fields, including tinning where more complicated machinery/systems and advanced technologies are required. Large enterprises currently dominating technologically demanding business fields are generally old and show a higher production and sales performance backed by technology.

As yet, there has been no transfer of technology from large enterprises to SMEs. Even if there is a call for linkage between large enterprises and SMEs, the large technological gap between them acts to prevent such linkage except for a few SMEs run by white owners. (The USAID has commenced a project designed to create such linkage while the UNIDO has decided to implement a project to organize small farmers for their linkage to white-run distribution channels.)

Zimbabwe produces large quantities of agricultural products, particularly vegetables and fruit, which are suitable for processing in Manicaland and other eastern regions. The fostering of food processing SMEs is an urgent task for the government to make the best use of such rich agricultural production.



Photo 5-5 Sun-Drying Factory in Murewa



Photo 5-6 Example of Sun-Dried Products

(2) Preconditions for Action Plan

The food processing industry involves wide-ranging processing technologies as well as raw materials and, therefore, the formulation of uniform promotion measures for the industry as a whole is difficult. Promotion measures must be formulated based on careful consideration of the particular circumstances of each sub-sector. As discovered by the field surveys, flour milling and some parts of the secondary processing of flour provide wide opportunities for the entry of SMEs as the technologies involved in these businesses are easy to learn. In addition, the amount of the initial funding required is relatively small.

In comparison, tinning and drying businesses are rather capital intensive and the technologies involved are fairly complicated, making it difficult for SMEs to enter these business fields. Moreover, factory-size food processing requires a reliable link with a distribution channel for its success.

While it appears difficult for SMEs to enter and grow in business fields which are currently dominated by large enterprises, the fostering of SMEs operating in local areas where specific products are produced is still an important agenda for the government. From this point of view, a scenario for the entry of SMEs into the dried vegetable business is described next as an example.

1) Promotion of Dried Vegetable (Fruit) Businesses

- The eastern part of Zimbabwe, including Mutare, Nyanga, Mutoko and areas extending from these areas, is a major fruit and vegetable production area. However, the insufficient road and transport network development as well as the poor transfer means hinders the smooth transportation of these agricultural products while the lack of adequate preservation technologies results in the rotting of surplus products. The introduction of food processing and preservation technologies with a view to developing a new industry should, therefore, prove extremely advantageous for the effective use of resources in Zimbabwe.
- b) Although traditional sun-dried foods are produced in Zimbabwe, the factory production of artificially dried foods with a higher efficiency and strict quality control is relatively new. Given the existence of a market for these products, it is believed that the fostering of SMEs in this field will prove to be extremely advantageous for Zimbabwe as it will mean the development of a food processing industry with a distinctive character.

2) Trends of Dried Vegetable and Fruit Markets

a) Dried Vegetables

<Domestic Markets>

- ① Sun-dried okra and mdamba, etc. are sold in the markets for consumption
- ② Dried vegetables are also used as the raw materials for processed foods (for example, Royco soup)

<Overseas Markets>

USA

Guilroy and Basic, major manufacturers of dried vegetables based in California, produce and market some 50,000 tons of onion and garlic, etc. a year.

2 Europe

Dried vegetables are used as the raw materials for soup and sausage, etc. A local joint venture with a Dutch enterprise supplies dried vegetables to Knorr Soup and other companies.

3 Japan

Japan provides a market for sun-dried, hot air-dried and freeze-dried (FD) products. The total demand for FD products is 7,120 tons/year. In addition, 330 million processed product meals (egg soup, etc.) are sold.

4 Japan and Southeast Asia

Dried vegetables are used as the ingredients for instant Rahmen noodles. The production of instant noodles is estimated to be 5 billion meals in Japan, 5 - 10 billion meals in China, 7 billion meals in Indonesia and totalling over 30 billion meals worldwide. Assuming the use of one gramme of dried vegetables per meal, the world market demand is 30,000 tons.

South America (Peru)

The production of dried vegetables has commenced for export to Japan, supplying 150 tons of dried, long spring onion a year.

b) Dried Fruit

<Domestic Markets>

- Dried bananas and mangoes are produced on a small scale.

<Overseas Markets>

- USA

The USA exports 118,809 tons of dried sultanas and currants worldwide (55,889 tons to Europe, 25,227 tons to Japan, 10,658 tons to Canada and 27,771 tons to the UK, etc.)

- The global harvest of tropical fruit (fresh) is 43 million tons, of which mangoes account for 19 million tons.

3) Agricultural Product Supply Mechanism

Even for small-scale processing activities, a stable supply of raw materials throughout the year is essential for the efficient use of production facilities. To this end, it is necessary to organize small-scale commercial farming activities by indigenous farmers working on communal land to create a mechanism for the steady supply of raw materials.

Here, the selection of appropriate sites for the establishment of such organization is left to another study. The following initiative should be adopted, assuming such organization. (Note: 1,500 - 2,000 ha of farmland is assumed to be required to supply a sufficient volume of agricultural products to a factory with a daily production capacity of 500 kg of hot air-dried products.)

4) Promotion Method

Three stage development is aimed at. These stages are the introduction of basic technologies (first stage), gradual learning of more advanced technologies (second stage) and the production of high quality merchandise (third stage).

<Development Method>

First Stage Second Stage Third Stage

Sun-drying/hot air drying (box type)

Hot air drying (tunnel type, conveyor type, etc.)

Freeze drying (FD) (advanced technology)

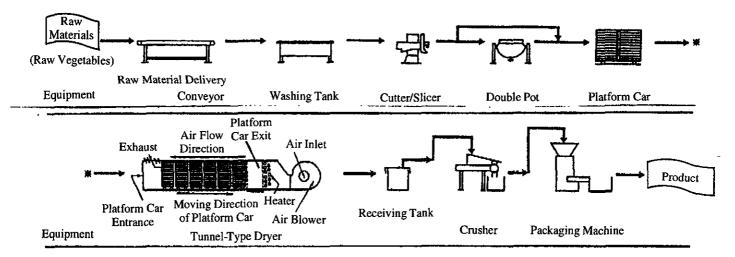


Fig. 5-9 Dried Vegetable Production Processes (Example)

(3) Recommendations for Development

The recommended scenarios for the development of the food processing industry to produce dried vegetables and fruit are described below.

<Programme 1: Promotion of food processing businesses using local products>

The processes of building and promoting an agricultural products processing base are explained here.

1) Site Selection

Appropriate sites should be selected from 67 growth points and others, taking proximity to agricultural production areas and other site conditions into consideration.

2) Assurance of Raw Material Supply

Small farmers should be organized to ensure a steady supply of raw materials to the base. In essence, the required amount of raw materials should be supplied from farmland of an appropriate size.

3) Construction of Food Processing Factory

1 Decision on Management System

The most appropriate management system should be selected. One example is a joint venture involving small farmers, an entrepreneur(s) and local public body(ies).

② Blue-Print for Factory

In the case of hot air drying using a box-type dryer, the daily production of 500 kg requires a dryer with a total shelf area of 625 m² (based on a yield of 8% and load of 10 kg). In addition to the main equipment, pre-treatment facilities for selection and washing, cutters, scales, packaging machines and raw materials/product warehouses, etc. are required.

Assuming a yield of 8%, the required raw material supply volume is 6,250 kg. If the yield is two tons/ha, 1,500 - 2,000 ha of farmland is necessary based on 200 - 300 working days/year.

The necessary processes for factory production prior to commercial production are as follows.

- Acquisition of land
- Recruitment of workers
- Construction of factory
- Training, test operation of equipment and trial production

4) Feasibility Study

A study should be conducted to verify the feasibility of the development concept above. This study should assume that the necessary promotion base has reached the third stage of development to identify the basic conditions for materialisation of the programme.

5) Introduction of Pilot Plant

A pilot plant which can be used for small-scale trial production as well as actual production should be introduced. This plant should be mobile, consisting mainly of a drying unit, so that it can be directly transported to production sites for use.

<Programme 2: Establishment of specialist technology and development of new merchandise>

The targeted vegetable and fruit drying technology is a new technology for Zimbabwe. The following recommendations are made in consideration of the fact that the learning and spread of such a technology is the key to stable food processing activities. It is assumed that the SIRDC will be the responsible body for the implementation of these recommendations.

- 1) Learning and Improvement of Specialist Technology
 - ① Training of Engineers and Technicians
 - Training at domestic research institutions
 - Study and training in countries in possession of advanced technologies
 - Transfer of technology from abroad
 - ② Training of Workers
 - Regular training at place of work
 - OJT
- 2) Catching-Up With International Technological Standards
 - Acquisition of international certification (ISO, etc.)
- 3) Development of New Commodities
 - (1) Promotion of Localisation of Technologies by R&D Organizations
 - R&D on the localised production of production facilities
 - R&D on the localisation production of packaging and other facilities
 - (2) Surveys on Market Trends, New Commodities and New Businesses
 - In addition to surveys on the domestic market, market trends in neighbouring countries, Europe, the US, Australia, Southeast Asian countries and Japan should be studied.
 - Information exchange with public R&D organizations throughout the world
 - Participation in international food exhibitions
 - Cooperation for efforts of SMEs to develop new merchandise and businesses in terms of product planning, trial production and trial marketing, etc.

<Programme 3: Improvement of supporting technologies>

One of the key factors to ensure successful food processing businesses is improvement of the supporting technologies/techniques in regard to the development of merchandise which is appropriate vis-a-vis consumer tastes, packaging acceptable by consumers and the consideration of sustained quality. The necessary measures to achieve such improvement are recommended next.

1) Research on Qualitative Characteristics of Raw Materials for Processing

2) Learning and Improvement of Packaging Technologies

In the case of dried vegetables, etc., the use of a film with an excellent moistureproofing and light shielding performance is required. In addition, high performance packaging machines are required in the case of packed products. Research is also necessary to localise the production of packaging materials and machines.

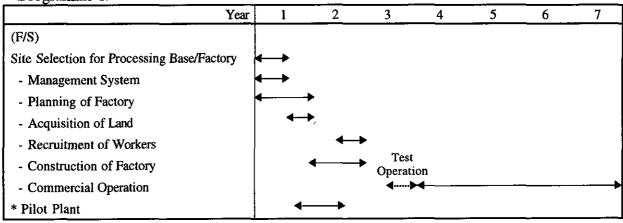
 Learning and Improvement of Manufacturing Technologies for Secondary Raw Materials

The domestic supply of such secondary raw materials as flavourings and seasonings is desirable as in the case of packaging materials and machines. One example is development of the technology to produce beef essence and other natural seasonings using domestic cattle.

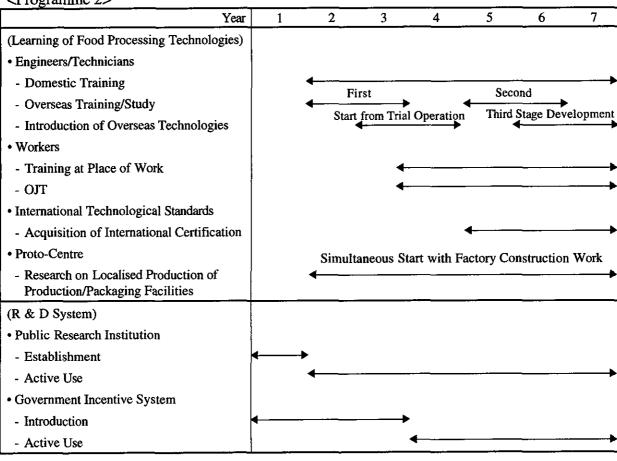
The above recommendations using dried vegetables as an example must be complementary to ensure the development of the food processing industry as a whole due to the wideranging sub-sectors in this industrial field. Fig. 5-8 shows the draft implementation schedule for the three recommended programmes.

Table 5-9 Action Programme Implementation Schedule for Food Processing Industry (Draft)

<Programme 1>



<Programme 2>



<Pre><Pre>rogramme 3>

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|---|-------------|-------------|--------------|-----------|------------|---------|
| - Research on Raw Material Characteristics | | ← | | | | | |
| - Learning of Packaging Technology | | | | | | | |
| - Learning of Technologies Related to
Secondary Raw Materials | | 4 —— | | | <u> </u> | <u> </u> | |
| - Environmental Protection Programme - In-House Hygiene Conditions | | Simult | aneous St | art with F | actory Co | nstruction | Work |

Further recommendations for the development of the flour milling and thinning sub-sectors are made below.

<Flour Milling>

(1) R & D on Milling of Crops Other Than Maize

Examples: sorgham, sweet potatoes (related to dried sweet potatoes), wheat and soybeans, etc.

(2) Development of Secondary Processed Merchandise

Examples: soup, roux (stew), instant noodles, gruel and maize snacks, nutritious powders, etc.

(3) Mobile Factories

Example: use of a truck mounted with a grinder to travel to various production areas

< Tinned Products >

(1) R & D on Packaging Forms Other than Tin

Examples: bottles, bags and retort pouches, etc.

(2) Commodity Development

Examples: - processed tomato products - puree, juice and ketchup, etc.

- processing fruit products: jams, marmalade and preserved fruit in sugar/salt

5.8.3 Recommendations for Textile and Clothing Industry (Sewing Industry)

(1) Profile of Sewing Industry

The sewing industry is a part of the textile industry, the activities of which range from yarn manufacturing to the marketing of clothes. The business of the sewing industry is considerably affected by the business trends of the upstream spinning and downstream consumer market. Here, the structure of the sewing industry in Zimbabwe is firstly analysed and the structural division of work of the sewing industry in Japan is described as an example of developed countries (see Figs. 5-10 and 5-11).

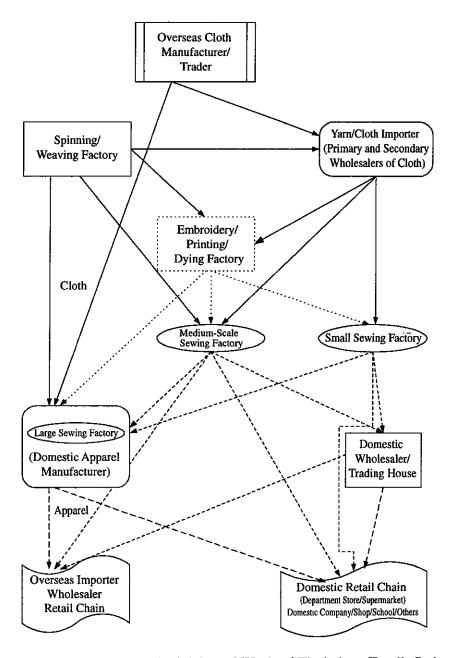


Fig. 5-10 Structural Division of Work of Zimbabwe Textile Industry

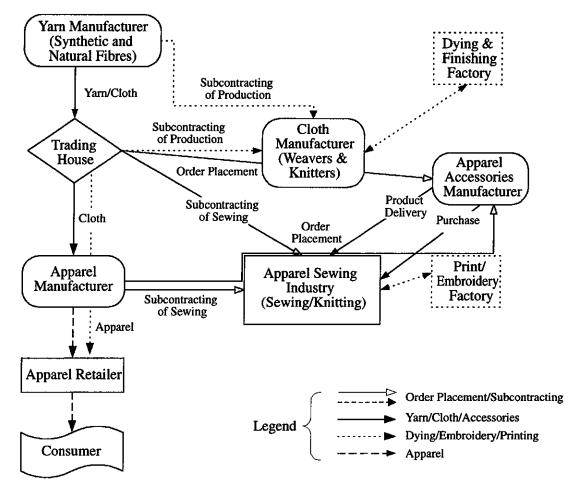


Fig. 5-11 Structural Division of Work in Japan

The difference between these countries is that while sewing enterprises in Japan rely on work commissioned by trading houses (traders) and that apparel manufacturers have their own brands, etc., those in Zimbabwe do not have many intermediaries (commercial capital).

1) Raw Materials

Most of raw materials are imported by wholesalers and traders except some domestically produced by spinners and cloth manufacturers. As their business scale is relatively small, sewing enterprises find it difficult to impose their needs (in terms of freedom of selecting cloth, quality, delivery terms and price, etc.) vis-a-vis suppliers. This difficulty constitutes a major handicap for sewing enterprises, particularly SMEs (in the case of commissioned work, cloth, etc. is often supplied).

2) Domestic Market and Second-Hand Clothes

As shown in Fig. 5-12, the production volume of clothes, including footwear, since 1995 has declined to the 1980 level.

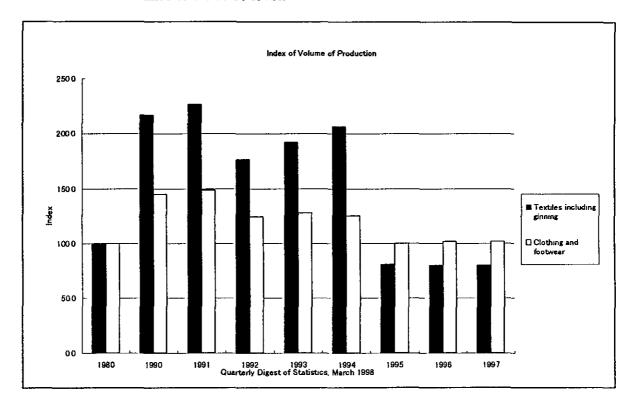


Fig. 5-12 Index of Volume of Production

The volume of textile production, including ginning, has also dropped since 1995 to the 40% level of 1994 (or the 80% level of 1980).

The rise of the consumer price index for clothes (including footwear) has fallen far behind that of other consumer items (see Fig. 5-13 "Consumer and Producer Price Index").

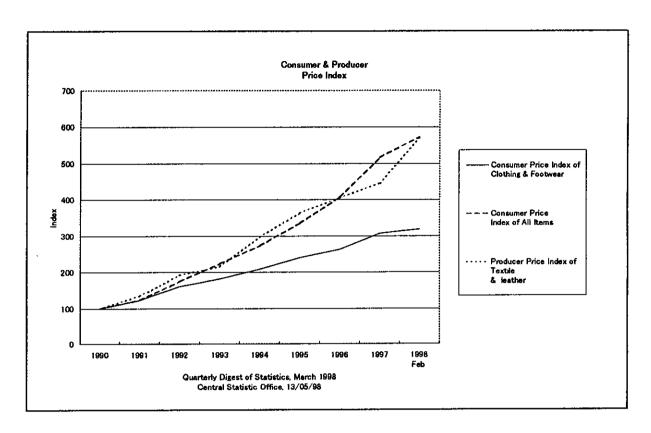


Fig. 5-13 Consumer & Producer Price Index

It is assumed that the decline of the textile industry in general can be attributed to the fall of the domestic demand, in turn caused by the sluggish economic performance of Zimbabwe, and also to the mass inflow of cheap imports (both raw materials and new as well as second-hand clothes).

3) Domestic Business Conditions

See Annex I - Enterprises Survey Report for details of the survey findings.

4) Future Direction for Export Market and Apparel Industry

The apparel industry, in which the sewing industry plays a central role, provides easy opportunities for new entry because heavy investment is not necessary. Furthermore, the small domestic market and severe competition from imported products suggest the possibility of domestic manufacturers struggling with one another to increase their own share of the small market.

Due to Zimbabwe's geographical advantage, however, growth of the apparel industry may be possible through development of the export market. Some examples are

non-quote exports to the US and EU and duty-free exports to the EU under the Lome Convention. Neighbouring South Africa has traditionally been a major export market for Zimbabwe even though there is currently a problem regarding the trade agreement. The rapidly growing US market of African Americans (some 10% of the entire population) provides the prospect of an export market for Zimbabwe's products as African Americans have similar tastes to the indigenous people of Zimbabwe.

In short, the export market is currently the only market which provides any prospect of quantitative growth for Zimbabwe products and is open to both large and small-size sewing enterprises in Zimbabwe.

5) Problems Related to Development of Export Market

As shown in Fig. 5-14 - Domestic Exports and Imports of Clothing, some 20 - 30 medium and large enterprises are already operating in the export market. Compared to the performance around 1990, the export value has increased some five-fold (Zimbabwe dollar base) depending on the items.

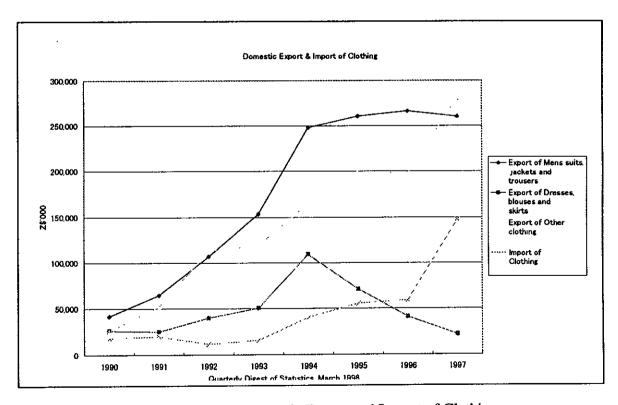


Fig. 5-14 Domestic Export and Import of Clothing

The small and medium sewing enterprises visited by the Study Team often do not have vital information for development of the export market, including information on the export market in general, information on overseas competitors and information on trendy fashions, etc.

In the case of most SMEs, marketing in the export market is headed by owners who directly negotiate with the Zimbabwe agents of importers. No SMEs appears to have a marketing strategy let alone a marketing department.

Quality is an essential precondition for successful exports. The local production equipment is generally good but modernisation is required to ensure export standard quality. Imports of textile-related machinery have been increasing in terms of the Zimbabwe dollar but have been declining when converted to the US dollar as shown in Fig. 5-15, implying that equipment renewal in the textile industry as a whole has been sluggish. This tendency was confirmed by the field survey.

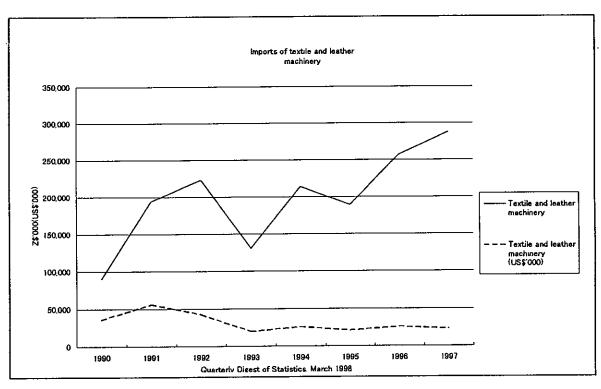


Fig. 5-15 Imports of Textile and Leather Machinery

In many instances, machine accessories to improve the productivity and quality are insufficient and computers for production control and other purposes are hardly used.

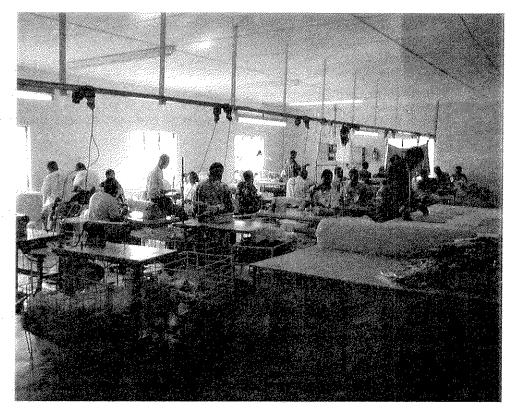


Photo 5-7 Sewing Factory in Zimbabwe

Based on the above assessment of the sewing industry, an action plan consisting of three programmes is recommended below to make the local sewing industry capable of competing in the export market where the potential for market development is good.

(2) Action Plan

The action plan target is the "development of SMEs to a level capable of entering the export market". The following three programmes should be implemented under the action plan to achieve this target.

Programme 1: Improvement of production control techniques

Programme 2: Improvement of cutting, sewing and finishing skills

Programme 3: Market development

Proper production control is a precondition for development of the export market. Past SMEs survey results show that many SMEs do not efficiently conduct production control by dividing the production processes, do not properly conduct production control (in terms of quality, cost and delivery terms) by examining the efficiency of the division of work or do not sufficiently understand that production based on the division of work is necessary to improve the production efficiency, i.e. productivity, and to ensure uniform quality.

In view of the above findings of past surveys, the programmes cover the three elements of production, i.e. workers, materials and equipment, and aim at establishing a system in which skills, technologies/techniques, high morale and equipment are integrated.

The fastest way of mastering cutting, sewing and finishing skills is to learn from persons with these skills. At the same time, the development and transfer of new skills, etc. through indigenous ideas to other workers will ensure survival in the face of competition. A fairly long period of time is required for workers to master new skills. As improvement of the cutting, sewing and finishing skills is inseparable from the manpower development programme to improve production control techniques, the simultaneous implementation of these two programmes is essential.

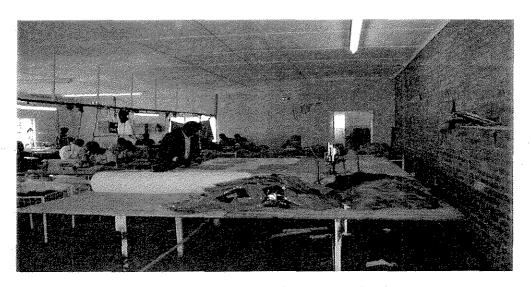


Photo 5-8 Cutting Section in a Sewing Factory

<Programmes 1 and 2: Improvement of production control techniques and cutting, sewing and finishing skills (assumed duration of 3 - 5 years)>

- 1) Manpower Development, Education and Training
 - a) Education and Training at Vocational Training Centres
 - Manpower training course: six months/course (continual)
 - Technicians training courses: six months/course (continual)
 - Cutting, sewing and finishing

• Integration of education/training by overseas engineers into three courses (three months/course; continual for 3 - 5 years)

b) Consolidation of Quality Inspection Facilities and Quality Inspection

The current quality inspection facilities of the SAZ should be reinforced so that all types of quality inspection can be properly conducted in a speedy manner, followed by quality inspection training.

c) Education and Training at Individual Enterprises

As the types of the required education and training may vary depending on the specific conditions of individual enterprises, appropriate training vis-a-vis such conditions should be provided.

- Travelling guidance at each factory by qualified persons with the necessary skill training (twice a year; continual)
- Travelling guidance at each factory by an overseas engineer(s) (once a year for three months)
- Travelling guidance at each factory by engineers of sewing machine manufacturers (twice a year for one month each time)

d) Education and Training Overseas

- Education and training at Japanese sewing manufacturers (one month a time; four times a year; continual for 3 5 years)
- Use of education and training courses sponsored by the Japanese government or local governments (12 months each time; continual)
- Practical training on training courses at sewing factories (1 2 years each time; continual)
- Study at fashion courses of technical colleges (as required)

e) Introduction of Technician Certification System (test: twice a year)

- Fostering of technicians under the certification programme to improve skills
- f) Domestic Skill Competition (once a year)
 - Improvement of skills through skill competitions

2) Primary and Secondary Raw Materials

The development of primary and secondary raw materials with international competitiveness should be promoted for the purpose of establishing a supply system.

a) Exhibitions

- Domestic Exhibitions
 - A raw material exhibition should be held to promote domestic production (once/twice a year)
- International Exhibitions
 - In Zimbabwe: invitation of raw material manufacturers at home and abroad (once/twice a year)
 - Abroad: participation in raw material exhibitions held abroad (once/twice a year)

b) Consolidation of Raw Material Database

Provision of a database on raw material manufacturers and manufacturers present at exhibitions

- Domestic manufacturers database
- Overseas manufacturers database

3) Machinery and Equipment

Continuous interest in machinery and equipment is essential to maintain international competitiveness.

a) Industrial machinery exhibitions (once/twice a year)

b) Latest Machinery

The latest machinery should be provided at vocational training centres where study meetings should be held (as required).

c) Dispatch of Technical Trainees

- Dispatch of technical trainees to machine exhibitions held abroad (1 - 2 weeks)

- Dispatch of technical trainees to sewing machine manufacturers (one month each time; four times/year for a period of 3 - 5 years)

d) Machine and Equipment Diagnosis at Individual Enterprises

- Diagnosis by qualified engineers (once/year; continual)
- Diagnosis by engineers of sewing machine manufacturers (twice/year; three months each time)

<Programme 3>

1) Market Development

For the development of the export market, it is firstly necessary to identify the particular needs of the target export market and to attract the attention of buyers by proposing merchandise which is appropriate for the market in question. It is also necessary to convince buyers that the required quality, cost and delivery terms can be properly met.

One important consideration based on the geographical location of Zimbabwe is that Zimbabwe is handicapped in terms of delivery because of its status as an inland country. In addition, the customs clearance procedure for goods for export should not be complex in order to ensure faster export than competitive coastal countries.

2) Action Plan for Market Development

a) Consolidation of ZIMTRADE

- Gathering and publication of fashion-related information
- Publication of export market survey findings and information on collected samples
- Gathering and publication of buyer information
- Sponsoring of exhibitions in target export markets to assist the export efforts of SMEs

b) Preferential Export Measures

- Introduction of a bonded manufacturing warehouse system to enable production at a competitive cost vis-a-vis overseas competitors
- Exemption of imported raw materials and secondary materials which are not available in Zimbabwe from import duty

- Exemption of investment in equipment for export-oriented production from import duty
- Special depreciation system regarding investment in equipment for exportoriented production
- Export promotion fund
 - Lending of funds using L/C as collateral once L/C has been arranged
 - Bridging loan until the payment for export sales is made
- Simplification and speeding-up of the customs clearance process for both imports and exports

c) Strong Promotion of Related Businesses

The competitiveness of the clothing industry vis-a-vis competitors in the export market is strongly influenced by the development of the related businesses listed below. In turn, development of the clothing industry contributes to the development of related businesses.

- Cotton farming
- Ginning factories
- Spinning factories
- Weaving factories
- Dying factories, printing and embroidery factories, napping factories
- Sewing factories
- Packaging factories
- Transporters
- Forwarders

d) Measures Regarding Second-Hand Clothes

- Import tariff system in line with the principle of proper competition
- Revision of the import tariff system regarding second-hand clothes so that domestically manufactured clothes can compete fairly with second-hand clothes, the cost base of which is entirely different